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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Paulus Cornelis Neervoort

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

HOEL, MATTHEW D

ART UNIT

PAPER NUMBER

3714

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,862	Applicant(s) NEERVOORT ET AL.	
	Examiner Matthew D. Hoel	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05/17/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4 to 8, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Norman, et al. (U.S. patent 5,702,305 A).

3. As to Claims 1 and 5 to 7: Norman teaches a method of performing a competition between teams by means of at least two sets of modular units (Abst.; Fig. 1, 5:45-64; competition as in an electronic card game or other game, Fig. 11, 10:25-45, 4:25-29), the method comprising acts of:

connecting a first set of modular units to a second set of modular units, wherein each set of modular units comprises at least one modular unit with each modular unit having a plurality of ports (Abst., Fig. 1, 5:45-64; plurality of ports, Fig. 3, 3:28-35, 6:16;25);

determining which one of the plurality of ports of the first set of modular units is connected to which one of the plurality of ports of the second set of modular units (Abst., Fig. 1, 5:45-64; plurality of ports, Fig. 3, 3:28-35, 6:16;25);

determining a set of information items for at least one modular unit, wherein each information item individually relates to a specific modular unit in the first and second

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sets, wherein the set of information items represents competition-related information, wherein the determined set of information items comprises connection-related information indicating which ones of the plurality of ports of the first set of modular units are connected to which ones of the plurality of ports of the second set of modular units (Fig. 11, draw cards displayed in the common area, player's hand cards displayed in the private area, 10:25-58; this common-area information will be indicative of at least the first wireless port of the player's device being connected to the controller 12, Fig. 1, 5:45-64; information indicating communication with another player, such as for the trades of 3:28-35 will necessarily be displayed in the private area of Fig. 11 and will necessarily be communicated via a second wireless port such as those of Fig. 3, 6:15-26);

creating a common game space or common playfield, including the determined set of information items based on the indication of which ones of the plurality of ports of the first set of modular units are connected to which ones of the plurality of ports of the second set of modular units such that each unique indication of connections of ports between the first and second set of modular units results in a correspondingly unique game space (the common game space being the virtual card table of Fig. 11, each player having his or her own "seat" at the virtual card table; (Fig. 11, draw cards displayed in the common area, player's hand cards displayed in the private area, 10:25-58; this common-area information will be indicative of at least the first wireless port of the player's device being connected to the controller 12, Fig. 1, 5:45-64; information indicating communication with another player, such as for the trades of 3:28-35 will

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necessarily be displayed in the private area of Fig. 11 and will necessarily be communicated via a second wireless port such as those of Fig. 3, 6:15-26); and

presenting the set of information items on the connected modular units during the competition (Fig. 11).

4. As to Claims 2 and 8: Norman sets a competition-related item of connected modular units during the competition based on the received first information item and based on which of a plurality of ports of the connected modular unit is connected relative to the other modular units (Abst., Fig. 1, 5:45-64; plurality of ports, Fig. 3, 3:28-35, 6:16;25; each modular units knows which wireless port is connected to which other modular unit 14 and/or control unit 12, and how many of the other modular units and/or control unit it is connected to).

5. As to Claim 4: Norman sets a competition-related item of connected modular units during the competition based on the received first information item and based on which of a plurality of ports of the connected modular unit is connected relative to the other modular units (Abst., Fig. 1, 5:45-64; plurality of ports, Fig. 3, 3:28-35, 6:16;25; each modular units knows which wireless port is connected to which other modular unit 14 and/or control unit 12, and how many of the other modular units and/or control unit it is connected to). Norman teaches a third modular unit (three or more modular units, Fig. 3, 6:16-25). The examiner notes that the applicants are defining a set of modular units in the claim language as one or more modular units.

6. As to Claim 18: Norman teaches the connection of the modular units as claimed determining an allocation of competition-related information during the competition (Fig.

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11, deal cards shown in common display area, player's respective hand shown in private viewing area, 10:25-58; players able to communicate deals privately with other players, which requires the device knowing which wireless port is connected to the corresponding wireless ports on the other devices, 3:28-35).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 22, 3, 9 to 17, and 19 to 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norman in view of Sharma (U.S. patent 6,287,200 B1).

10. As to Claim 22: Norman discloses all of the limitations of Claim 22 except for competition-related information comprising the physical locations of the connected modular units relative to one another or a cumulative physical layout comprising a layout of virtual players during the competition. Norman teaches performing a

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competition between teams by means of at least two sets of modular units (Abst.; Fig. 1, 5:45-64; competition as in an electronic card game or other game, Fig. 11, 10:25-45, 4:25-29). Norman teaches connecting a first set of modular units to a second set of modular units, wherein each set of modular units comprises at least one modular unit with each modular unit having a plurality of ports (Abst., Fig. 1, 5:45-64; plurality of ports, Fig. 3, 3:28-35, 6:16;25). Norman teaches determining which one of the plurality of ports of the first set of modular units is connected to which one of the plurality of ports of the second set of modular units (Abst., Fig. 1, 5:45-64; plurality of ports, Fig. 3, 3:28-35, 6:16;25). Norman teaches determining a set of information items for at least one modular unit, wherein each information item individually relates to a specific modular unit in the first and second sets, wherein the set of information items represents competition-related information, wherein the determined set of information items comprises connection-related information indicating which ones of the plurality of ports of the first set of modular units are connected to which ones of the plurality of ports of the second set of modular units (Fig. 11, draw cards displayed in the common area, player's hand cards displayed in the private area, 10:25-58; this common-area information will be indicative of at least the first wireless port of the player's device being connected to the controller 12, Fig. 1, 5:45-64; information indicating communication with another player, such as for the trades of 3:28-35 will necessarily be displayed in the private area of Fig. 11 and will necessarily be communicated via a second wireless port such as those of Fig. 3, 6:15-26). Norman teaches creating a common game space or common playfield, including the determined set of information items based on the

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indication of which ones of the plurality of ports of the first set of modular units are connected to which ones of the plurality of ports of the second set of modular units such that each unique indication of connections of ports between the first and second set of modular units results in a correspondingly unique game space (the common game space being the virtual card table of Fig. 11, each player having his or her own "seat" at the virtual card table; (Fig. 11, draw cards displayed in the common area, player's hand cards displayed in the private area, 10:25-58; this common-area information will be indicative of at least the first wireless port of the player's device being connected to the controller 12, Fig. 1, 5:45-64; information indicating communication with another player, such as for the trades of 3:28-35 will necessarily be displayed in the private area of Fig. 11 and will necessarily be communicated via a second wireless port such as those of Fig. 3, 6:15-26). Norman teaches presenting the set of information items on the connected modular units during the competition (Fig. 11).

11. Sharma, however, teaches competition-related information comprising the physical locations of the connected modular units relative to one another or a cumulative physical layout comprising a layout of virtual players during the competition (Fig. 2, 3:9-24; Fig. 3, 3:30-44). It would have been obvious to one of ordinary skill in the art at the time of invention to have applied the competition-related information comprising the physical locations of the connected modular units relative to one another and the cumulative physical layout comprising a layout of virtual players during the competition of Sharma to the gaming system of Norman. Sharma is compatible in mode of operation to Norman. Sharma uses motion detection to detect the actual

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physical motions of the player to enable the player and others to play a virtual game of volleyball, or some other virtual sports game (Fig. 5, 3:45-61); Norman discloses that it can use motion detection (10:59-66). Norman, like, Sharma is a local ad-hoc network in which portable wireless devices communicate within range (radio, infrared, etc.) of each other (Sharma, Abst., Fig. 1, 2:24-45, 53-65; Norman, Fig. 3, 6:16-25). The advantage of this modification is that it would make the game more realistic in that the players would always be situated relative to one another in physical space as they are in the virtual playing space, for example, the players in the virtual card game space of Sharma (3:7-20) would be located relative to one another such as around an actual card table. This modification would make game play more concrete to players, making the games easier to learn and play.

12. As to Claims 3 and 9: Norman sets a competition-related item of connected modular units during the competition based on the received first information item and based on which of a plurality of ports of the connected modular unit is connected relative to the other modular units (Abst., Fig. 1, 5:45-64; plurality of ports, Fig. 3, 3:28-35, 6:16; 25; each modular unit knows which wireless port is connected to which other modular unit 14 and/or control unit 12, and how many of the other modular units and/or control unit it is connected to). Sharma teaches a second competition, in that the players are able to select from plural games available to be played with the modular units (3:34-37).

13. As to Claims 10 to 17: Sharma teaches which ones of the plurality of ports of a first set of modular units are connected to which ones of the plurality of ports of a

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second set of modular units as claimed determining a physical layout of the common game space or physical layout of players relative to one another within the common game space during the competition (wireless ports connecting to other available devices in range, Fig. 1, 2:53-64; physical game space corresponding to virtual game space, Fig. 2, 3:9-24; Fig. 3, 3:30-44).

14. As to Claims 19 to 21: Sharma teaches the claimed determination of size of the playing field (positions determined and relative positions displayed, 3:9:24), shape of the playing field (shape of virtual playing field displayed, Fig. 3, 3:30-38), and a layout of the virtual players during the competition (Fig. 3, 3:30-38).

Claim Rejections - 35 USC § 101

15. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

16. Claims 6, 14, and 15 (ind. Claim 6 and its dependents) are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Because computer-executable instructions stored on a computer-readable medium can be interpreted as both non-transitory instructions and transitory signals, the claims should cite that the instructions are non-transitory. See MPEP 2106(IV)(B) regarding *in re Nuijten*, Docket no. 2006-1371 (Fed. Cir. Sept. 20, 2007). See also the 01-26-2010 Subject Matter Eligibility memo at

http://www.uspto.gov/patents/law/notices/101_crm_20100127.pdf.

Response to Arguments

17. Applicant's arguments with respect to claims 1 to 22 have been considered but are moot in view of the new ground(s) of rejection. Kagan is no longer used as a primary reference as the claims no longer read on Kagan; Sharma is still used as a secondary reference regarding the aspects of the players' virtual positions corresponding to their actual positions.

18. Regarding Sharma, Sharma teaches competition-related information comprising the physical locations of the connected modular units relative to one another or a cumulative physical layout comprising a layout of virtual players during the competition (Fig. 2, 3:9-24; Fig. 3, 3:30-44). One would have been motivated to apply the competition-related information comprising the physical locations of the connected modular units relative to one another and the cumulative physical layout comprising a layout of virtual players during the competition of Sharma to the gaming system of Norman. Sharma is compatible in mode of operation to Norman. Sharma uses motion detection to detect the actual physical motions of the player to enable the player and others to play a virtual game of volleyball, or some other virtual sports game (Fig. 5, 3:45-61); Norman discloses that it can use motion detection (10:59-66). Norman, like, Sharma is a local ad-hoc network in which portable wireless devices communicate within range (radio, infrared, etc.) of each other (Sharma, Abst., Fig. 1, 2:24-45, 53-65; Norman, Fig. 3, 6:16-25). The result of this modification is that it would make the game more realistic in that the players would always be situated relative to one another in physical space as they are in the virtual playing space, for example, the players in the

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virtual card game space of Sharma (3:7-20) would be located relative to one another such as around an actual card table. This modification would make game play more concrete to players, making the games easier to learn and play.

19. Sharma teaches, in the same manner that Norman does at Fig. 3, which ones of the plurality of ports of a first set of modular units are connected to which ones of the plurality of ports of a second set of modular units as claimed determining a physical layout of the common game space or physical layout of players relative to one another within the common game space during the competition (wireless ports connecting to other available devices in range, Fig. 1, 2:53-64; physical game space corresponding to virtual game space, Fig. 2, 3:9-24; Fig. 3, 3:30-44). Both Sharma and Norman (the new base reference) will necessarily have to know which wireless ports are connected to which other devices to function as discussed above.

20. Sharma discloses the competition-related information depending on the physical locations of the modular units relative to each other (plural wireless gaming devices within radio range of each other, Abst., Fig. 1, 2:53-3:8). The information is competition-related as the users are able to play on teams in virtual volleyball games against each other (3:30-38). Each mobile user has the coordinates or relative location of each other user (Fig. 2, 3:9-24). Sharma both is a virtual games that involves ad-hoc groups of wirelessly connected mobile devices (Sharma, Abst., ad-hoc in sense that to start a game, a modular unit must detect other modular units within radio range, 2:24-44). Sharma uses short-range radio communication in the form of Bluetooth (2:18-20); the short range of 1 to 10 meters (2:20-22) necessitates the direct correspondence of actual

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to virtual position as this will be about the size of an actual volleyball court. Sharma similarly simulates an analogous team sport in which players are able to set or pass the ball to one another (volleyball, 3:30-38). Sharma's mode of operation as applied to the game of Norman is that Sharma's spatial arrangement of characters in virtual space corresponding to the player's positions in real space would serve to make the game more realistic, as the players' positions would make it readily apparent to each other which other players would be able to receive a set or passed ball (Fig. 5, 3:45-61; players' actual motions same as their virtual motions, 3:62-65).

21. Sharma discloses competition-related information pertaining to the relative positions of the players while the mobile units are connected to each other. 2:24-44 describes the mobile devices detecting other devices within radio range. 3:10-24 describes each device displaying the relative positions of the other devices within range. Fig. 3 and 3:31-38 teach the players' relative locations with competition-related information pertaining to which player is on which team and which side of the virtual volleyball net each player is on. Thus, Sharma teaches competition-related information based on the relative positions of currently *connected* (3:24-44) players' mobile devices.

22. *As previously indicated*, putting claims 19 and 20's limitations together into the independent claims to cite determining the size *and* layout of a virtual playfield, with the additional limitation of determining the size and layout of the virtual playfield according to the type of detected game as currently being played, would in the examiner's opinion be allowable. These limitations would need to be tied to the *cumulative* addition of modular units to determine the type of game being played and thus the size and shape

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of the virtual playfield. Para. 76 of the specification, 2005/0288100 A1, discusses the type of game, in this case soccer, being determined by the number of modular units connected, two teams of eleven modular units. Para. 87 talks about the relative locations of the respective units being tied to the type of game being played. Paras. 40, 90, and 112 discuss additional modular units changing the size and shape of the playfield, allowing new types of games to be played. The independent claims need to cite how the *cumulative* nature of the number of modular units detected and connected determine the type of game being played, and thus the size and shape of the virtual playfield, and how the type of game being played, along with its playfield's shape and size, is determined by the number and relative locations of the modular units at any given time.

23. *The applicants' specification is essentially pickup ball, except played with wireless modular units.* In pickup ball, players come and go throughout the afternoon (which is the cumulative crux of the applicants' invention), and teams are formed and reformed, until at the end of the afternoon everybody has gone home, after the number of remaining players has tricked off for awhile. Even the types of games being played will change as players come and go from pickup games. More players, say will be needed for regulation basketball with five players on each team, and fewer for one-on-one basketball. The claims as presently amended come closer to establishing the nexus between the size and shape of the playfield tied to the particular type of game being played, but still do not cite all of these limitations together in the independent

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claims. The examiner respectfully disagrees with the applicants as to the claims' condition for allowance.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yavetz in U.S. patent 4,938,483 A teaches opposing teams of wireless toys. Breslow, et al. in U.S. patent 4,337,948 A teach modular games. Shackeford in U.S. patent 6,443,796 B1 teaches a modular game.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Hoel whose telephone number is (571) 272-5961. The examiner can normally be reached on 8:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. D. H./
Examiner, Art Unit 3714

/David L Lewis/
Supervisory Patent Examiner, Art Unit 3714